EXAMPLE 32

N6-Benzoyl-5'-O-DMT-3'-O-(butylphthalimido)-adenosine

[0169] The title compound is prepared from 3'-*O*-(butyl-phthalimide)-N^6-benzoyladenosine as per Example 22.

EXAMPLE 33

N6-Benzoyl-5'-O-DMT-3'-O-(butylphthalimido)-Adenosine-2'-O-(2-cyanoethyl-N,N-diisopropyl) phosphoramidite

[0170] The title compound is prepared from 3'-*O*-(butylphthalimide)-5'-*O*-DMT-N^6-benzoyladenosine as per Example 24.

EXAMPLE 34

3'-O-(Pentylphthalimido)-adenosine

[0171] The title compound is prepared as per Example 21, using N-(5-bromopentyl)phthalimide. The crude material from the extraction is chromatographed on silica gel using $CHCl_3$/MeOH (95/5) to give a mixture of the 2' and 3' isomers. The 2' isomer is recrystallized from EtOH/MeOH 8/2. The mother liquor is rechromatographed on silica gel to afford the 3' isomer.

2'-*O*-(Pentylphthalimido)adenosine: M.P. 159-160 °C. Anal. Calcd. for $C_{23}H_{24}N_6O_5$: C, 57.26; H, 5.43; N, 17.42. Found: C, 57.03; H, 5.46; N, 17.33. 3'-*O*-(Pentylphthalimido)adenosine: ^{1}H NMR (DMSO-d_6) δ 5.87 (d, 1H, H-1').

EXAMPLE 35

N6-Benzoyl-3'-O-(pentylphthalimido)-adenosine

[0172] Benzoylation of 3'-*O*-(pentylphthalimido)adenosine is achieved as per the procedure of Example 22 to give the title compound.

EXAMPLE 36

N6-Benzoyl-5'-O-DMT-3'-O-(pentylphthalimido)-adenosine

[0173] The title compound is prepared from 3'-*O*-(pentyl-phthalimide)-N^6-benzoyladenosine as per the procedure of Example 23. Chromatography on silica gel (ethylacetate, hexane, triethylamine), gives the title compound.

EXAMPLE 37

N6-Benzoyl-5'-O-DMT-3'-O-(pentylphthalimido)-adenosine-2'-O-(2-cyanoethyl-N,N-diisopropyl) phosphoramidite

[0174] The title compound is prepared from 3'-*O*-(pentyl-phthalimide)-5'-*O*-(DMT)-N^6-benzoyladenosine as per the procedure of Example 24 to give the title compound.

EXAMPLE 38

3'-O-(Propylphthalimido)uridine

[0175] A solution of uridine-tin complex (48.2 g, 115 mmol) in dry DMF (150 ml) and N-(3-

bromopropyl)phthalimide (46 g, 172 mmol) was heated at 130 °C for 6 hrs. The crude product was chromatographed directly on silica gel $CHCl_3$/MeOH 95/5. The isomer ratio of the purified mixture was 2'/3' 81/19. The 2' isomer was recovered by crystallization from MeOH. The filtrate was rechromatographed on silica gel using $CHCl_3CHCl_3$/MeOH (95/5) gave the 3' isomer as a foam. 2'-*O*-(Propylphthalimide)uridine: Analytical sample recrystallized from MeOH, m.p. 165.5-166.5C, ^{1}H NMR (200 MHZ, DMSO-d_6) δ 1.87 (m, 2H, CH_2), 3.49-3.65 (m, 4H, C_2H), 3.80-3.90 (m, 2H, $C_3H_1C_4H$), 4.09(m, 1H, C_2H), 5.07 (d, 1h, C_3OH), 5.16 (m, 1H, C_5OH), 5.64 (d, 1H, CH=), 7.84 (d, 1H, C_1H), 7.92 (bs, 4H, Ar), 7.95 (d, 1H, CH=) and 11.33 (s, 1H, ArNH). Anal. $C_{20}H_{21}N_3H_8$, Calcd. C, 55.69; H, 4.91;, N, 9.74. Found, C, 55.75; H, 5.12; N, 10.01. 3'-*O*-(Propylphthalimide)uridine: ^{1}H NMR (DMSO-d_6) δ 5.74 (d, 1H, H-1').

EXAMPLE 39

3'-O-(Aminopropyl)-uridine

[0176] The title compound is prepared as per the procedure of Example 25.

EXAMPLE 40

3'-O-[3-(N-trifluoroacetamido)propyl]-uridine

[0177] 3'-*O*-(Propylamino)uridine is treated as per the procedure of Example 26 to give the title compound.